

Response to New Arguments Raised by Examiner

Examiner has variously cited several sections in Seeger where Seeger indicates formatting information (e.g., bounding boxes, text region and text lines associated with each word) may be stored along with text information. See Seeger at column 4, lines 50-62, and column 3, lines 33 through 39.

Examiner then appears to be arguing that because Seeger teaches that bounding box information is stored, this implies or makes obvious Applicant's use of bounding shapes when situating words in a page during formatting of text. This argument by Examiner is clearly erroneous.

In Seeger, storage of bounding boxes is for use in selecting a text region:

Seeger very clearly teaches why formatting information (including word bounding box information) is stored with text information. It is for help *in selecting a text region*.

In fact, using stored formatting information for the purpose of selecting a text region is central to the teaching of Seeger and goes to the very heart of Seeger's claimed invention. This is apparent from even a cursory review of the claims of Seeger.

For example, claim 1 sets out a method of selecting a text region from an image. In the very first step of Claim 1 (step (a)), Seeger states that formatting information *including word bounding box information*, is accessed from a memory

device. See Seeger at column 12, lines 58 through 65. The rest of claim 1 sets out how this stored formatting information is used to select the text region.

Claim 2 of Seeger indicates that prior to step (a) the formatting information for each word is stored. Examiner has cited several sections in Seeger (e.g., column 4, lines 50-62, and column 3, lines 33 through 39) where this storing of formatting information (including word bounding box information) is additionally described.

The use of stored formatting information (including word bounding box information) for text selection is central to the teaching of Seeger and taught throughout Seeger, for example, in the Abstract and in the Detailed Description.

In claim 1 of the present case bounding shapes are used in word placement

Claim 1 sets out a method for formatting text in a document. In step (a), bounding shapes are placed around each word in the text. In step (b), a first word is situated in a first valid location within a page. In step (c), subsequent words are situated in subsequent valid locations on the page. Once any word is situated, a bounding shape for the word sets out an area invalid for additional word placement.

It is clear that claim 1 of the present case is discussing word placement when formatting text in a document, and is not discussing selection of a text region, as is taught by Seeger.

Examiner has improperly read the teaching of Applicant's use of bounding shapes for word placement into Seeger

Using hindsight analysis to read into the art Applicant's own teaching is improper. See, for example, *In re Diminski*, 796, F.2d 436, 230 U.S.P.Q. 313 (Fed. Cir. 1986). However, this is what Examiner appears to be doing.

For example, Examiner has argued the following: "In other words, after the text selection in a document image has been performed, the OCR'd text together with bounding boxes indicating the coordinates *or placement of the OCR'd words in a new document*, are stored in a single file for later use *and display*." Italics added.

As illustrated by the italicized words in the quoted section of Examiner's statement, Examiner has read into Seeger that bounding boxes are to be used for placement of words in a new document. This concept is nowhere taught or suggested by Seeger. Seeger very clearly teaches that formatting information (including bounding boxes) is stored for use in selecting a text region. Examiner has ignored this clear teaching of Seeger and has instead chosen to "read into" Seeger Applicant's teaching of using bounding shapes for use in placement of text. This type of argumentation is clearly improper.

Examiner makes many other similar statements. For example, Examiner asserts "The bounding boxes are used for formatting purposes, not just recognition purposes." (underlining in the original). As is clear from the above discussion, Seeger teaches storage of formatting information (including word bounding box information) for the purpose of text selection. Seeger nowhere

discloses or suggests that this information is used in the formatting of a new document. Examiner has merely read into Seeger Applicant's teaching of using bounding shapes for use in placement of text.

Reiteration of Reasons for Traversal of Rejection

Criteria for a Rejection under 35 U.S.C. § 103

The U.S. Patent and Trademark Office has set forth a methodology for establishing a *prima facie* case of obviousness. Specifically three basic criteria must be met.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

See MPEP 706.02 (j).

Appellant believes the Examiner has failed to establish a *prima facie* case of obviousness for the claims extant in the present case because there are claim limitations that are not taught or suggested by any of the cited references. Applicant below points out subject matter in each of the independent claims that is not disclosed or suggested by the cited references. On the basis of this, Applicant believes all the claims are allowable over the cited references.

Summary of Seeger

Seeger discloses an image processing technique for selecting a text region from an image. Character and formatting information for each word in the image is used to determine an active region for each word in the image. See the Abstract. The formatting information used to select a text region includes word bounding box information (see column 4, lines 48 through 54).

Seeger uses formatting information (including word bounding boxes) obtained during OCR for text selection, specifically, to determine a selected word region. See column 3, lines 31 through 39. Seeger does not teach or suggest use of bounding shapes around words to format text in a document, as set out in the claims of the present case.

Discussion of Independent Claim 1

Claim 1 sets out a method for formatting text in a document. In step (a), bounding shapes are placed around each word in the text. In step (b), a first word is situated in a first valid location within a page. In step (c), subsequent words are situated in subsequent valid locations on the page. Once any word is situated, a bounding shape for the word sets out an area invalid for additional word placement.

Use of a bounding shape to set out an area invalid for additional word placement:

Examiner has conceded that Seeger does not disclose: "a bounding shape sets out an area invalid for additional word placement." Examiner then argues as follows:

However, it would have been obvious for a person of ordinary skill in the art at the time of the invention to set out the bounding box as an area invalid for additional word placement, because Seeger teaches the enhancement of usability and productivity of text selection (col. 3, lines 47-53). This would provide the benefit of keeping words from overlapping each other, thereby rendering the OCR'd text unreadable, and unusable.

In column 3, lines 47 through 53, Seeger is not discussing word placement (situating words), as set out in step (c) of claim 1. Rather, in column 3, lines 47 through 53, Seeger is discussing using information derived from OCR to perform text selection. See column 3, lines 31 through 43. In text selection, the first and last word within a selected text region is identified based on at least one active region associated with at least one word within the selected text region. Using the first and last words within the selected text region, all words within the selected text region are identified. See the Abstract.

Examiner has made the following statement: "This would provide the benefit of keeping words from overlapping each other, thereby rendering the OCR'd text unreadable, and unusable." This statement by Examiner does not make sense in the context of Seeger at column 3, lines 47 through 53. In Seeger, bounding boxes around words are determined for text that is being recognized, not placed. When words are being recognized, bounding boxes do not prevent

overlap, because the words are already located on the page being recognized. In Seeger, placement of bounding boxes around words does not prevent overlap and is unrelated to overlap. Rather, during OCR, the bounding boxes for words allow the OCR program to divide text into words for the purpose of word recognition. The bounding boxes are not pertinent to any subsequent placement of the words and are not related to subsequent placement of the recognized words within a text region.

In claim 1 of the present application, bounding shapes are placed around each word in the text when formatting the text in a document. Seeger recognizes that bounding boxes are used for the purpose of optical character recognition. Additionally, Seeger teaches that formatting information (including word bounding boxes) obtained during OCR can be stored for use in text selection. See column 3, lines 31 through 39. However, Seeger does not disclose or suggest use of bounding boxes for use in formatting text in a new document. Seeger, therefore, does not disclose or suggest the subject matter of claim 1.

Discussion of Independent Claim 11

Claim 11 sets out a method for formatting text in a document. In step (a), bounding shapes are placed around each word in the text. Step (d) indicates that once any word is situated, a bounding shape for the word sets out an area invalid for additional word placement. This is not disclosed or suggested by Seeger or Ueda.

Use of a bounding shape to set out an area invalid for additional word placement:

Examiner has conceded that Seeger does not disclose: "a bounding shape sets out an area invalid for additional word placement." Ueda does not disclose or suggest the use of bounding shapes around words. Examiner, however, has argued that it would have been obvious for a person of ordinary skill in the art at the time of the invention to set out the bounding box as an area invalid for additional word placement. Examiner has asserted this would provide the benefit of keeping words from overlapping each other, thereby rendering the OCR'd text unreadable, and unusable.

However, in the portion of Seeger cited by Examiner, column 3, lines 47 through 53, Seeger is not discussing word placement (situating words), as set out in step (d) of claim 11. Rather, in column 3, lines 47 through 53, Seeger is discussing using information derived from OCR to perform text selection. See column 3, lines 31 through 43. In text selection, the first and last word within a selected text region is identified based on at least one active region associated with at least one word within the selected text region. Using the first and last words within the selected text region, all words within the selected text region are identified. See the Abstract.

Examiner has made the following statement: "This would provide the benefit of keeping words from overlapping each other, thereby rendering the OCR'd text unreadable, and unusable." This statement does not make sense in

the context of Seeger at column 3, lines 47 through 53. In Seeger, bounding boxes around words are determined for text that is being recognized, not placed. When words are being recognized, bounding boxes do not prevent overlap, because the words are already located on the page being recognized. In Seeger, placement of bounding boxes around words does not prevent overlap and is unrelated to overlap. Rather, during OCR, the bounding boxes for words allow the OCR program to divide text into words for the purpose of word recognition. The bounding boxes are not pertinent to any subsequent placement of the words and are not related to subsequent placement of the recognized words within a text region.

In claim 11 of the present application, bounding shapes are placed around each word in the text when formatting the text in a document. Seeger recognizes bounding boxes are used for the purpose of optical character recognition. Additionally, Seeger teaches that formatting information (including word bounding boxes) obtained during OCR can be stored for use in text selection. See column 3, lines 31 through 39. However, Seeger does not disclose or suggest use of bounding boxes for use in formatting text in a new document. Seeger, therefore, does not disclose or suggest the subject matter of claim 11.

Discussion of Independent Claim 19

Claim 19 sets out storage media that stores software which when executed performs a method for formatting text in a document. In step (a), bounding shapes are placed around each word in the text. Step (c) indicates that once any word is situated, a bounding shape for the word sets out an area invalid for additional word placement. This is not disclosed or suggested by Seeger or Ueda.

Use of a bounding shape to set out an area invalid for additional word placement:

Examiner has conceded that Seeger does not disclose: "a bounding shape sets out an area invalid for additional word placement." Ueda does not disclose or suggest the use of bounding shapes around words. Examiner, however, has argued that it would have been obvious for a person of ordinary skill in the art at the time of the invention to set out the bounding box as an area invalid for additional word placement. Examiner has asserted this would provide the benefit of keeping words from overlapping each other, thereby rendering the OCR'd text unreadable, and unusable.

However, in the portion of Seeger cited by Examiner, column 3, lines 47 through 53, Seeger is not discussing word placement (situating words), as set out in step (c) of claim 19. Rather, in column 3, lines 47 through 53, Seeger is discussing using information derived from OCR to perform text selection. See column 3, lines 31 through 43. In text selection, the first and last word within a

selected text region is identified based on at least one active region associated with at least one word within the selected text region. Using the first and last words within the selected text region, all words within the selected text region are identified. See the Abstract.

Examiner has made the following statement: "This would provide the benefit of keeping words from overlapping each other, thereby rendering the OCRed text unreadable, and unusable." This statement does not make sense in the context of Seeger at column 3, lines 47 through 53. In Seeger, bounding boxes around words are determined for text that is being recognized, not placed. When words are being recognized, bounding boxes do not prevent overlap, because the words are already located on the page being recognized.

Seeger recognizes that bounding boxes are used for the purpose of optical character recognition. Additionally, Seeger teaches that formatting information (including word bounding boxes) obtained during OCR can be stored for use in text selection. See column 3, lines 31 through 39. However, Seeger does not disclose or suggest use of bounding boxes for use in formatting text in a new document.


In claim 19 of the present application, bounding shapes are placed around each word in the text when formatting the text in a document. In Seeger, bounding boxes are used for the purpose of optical character recognition and for selection of text, not for formatting text. Seeger, therefore, does not disclose or suggest the subject matter of claim 19.

Conclusion

Applicant believes this Amendment has placed the present case in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,

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